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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,114	05/21/2007	Dongcheng Dai	57070-8020.US00	3360
22918	7590	02/18/2010		
PERKINS COIE LLP P.O. BOX 1208 SEATTLE, WA 98111-1208			EXAMINER DENTZ, BERNARD I	
			ART UNIT 1625	PAPER NUMBER
			NOTIFICATION DATE 02/18/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentprocurement@perkinscoie.com
skempe@perkinscoie.com

Office Action Summary	Application No. 10/584,114	Applicant(s) DAI ET AL.	
	Examiner Bernard Dentz	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-30 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-26 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11-7-06, 6-25-09, 8-21-09</u> . | 6) <input type="checkbox"/> Other: ____. |

Claims 1-14 and 16-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Li et al, US Patent 7,626,044 which claims priority of and has an is the equivalent disclosure to WO 2004058770, cited by applicants, which was filed as PCT/CN3/00095 on 1-28-2003, which in turn claims the priority of Chinese Patent Application 02160524.6 filed 12/27/2002. It discloses the syntheses of most of the instant 5- and 6- mono-substituted or 5,6-disubstituted triptolide derivatives. The compounds are disclosed as being useful in effecting immunosuppression and in inducing apoptosis in a cell.

For the syntheses see col. 3-6 and Ex. 1-8. For the utility see col. 1, lines 42-46, Experiment 5 at col. 21 and col. 29, lines 45-62 e.g.

Claims 1-6, 9, 10, 16-18 and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by Ning et al, Tetrahedron, vol. 59, p. 4209-4213, published June 3, 2003 and cited by applicants. It discloses the production of 5-alpha-hydroxytriptolide by the biotransformation of triptolide by *Cunninghamella blakesleana*.

See formula 2 on p. 2010 and the description of its properties at p. 4209, col. 2. See its NMR properties in Table 1. See p. 4212 and 4213 sections 3.5, 3.6 and 3.61 for the synthesis and isolation. The compound is disclosed as exhibiting potent in vitro cytotoxicity against some human tumor cell lines.

Claims 1-14 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al, *supra*. The 14-esters are embraced by the genus by Li. See col. 1 and 2 and claim 1. Of course the monosuccinate ester of triptolide is a known compound.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ning et al, supra. Its above mentioned cytotoxicity disclosure suggests apoptosis inducing activity.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. R3 has no antecedent basis in claim 1 from which it depends.

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Dentz whose telephone number is 571-272-0683. The examiner can normally be reached on Mon-Fri from 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on 571 272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ Bernard Dentz/

Primary Examiner, Art Unit 1625